REMARKS

No claims having been cancelled or added, the Applicants respectfully submit that a total of 22 claims, *i.e.*, claims 1-22 remain pending and properly under consideration in the present application. Of those, claims 1 and 16 are independent claims.

Rejection under 35 U.S.C. § 112, second paragraph

Claim 22 has been rejected under 35 U.S.C. § 112, second paragraph as being indefinite. In particular, the Examiner asserts that it is unclear whether the recited "second coupling agent" in claim 22 encompasses the "one or more silane coupling agents" recited in claim 18 or another coupling agent.

In response to this rejection, Applicants have clarified claim 22 to recite that the composite includes a coupling agent in addition to the one or more silane coupling agent(s) included in the sizing composition. Applicants submit that as amended, claim 22 is sufficiently definite and respectfully request that the Examiner reconsider and withdraw this rejection.

Rejection under 35 U.S.C. § 102(b)

Claims 1 - 5, 7, 8, 10, 11, and 13 - 21 have been rejected under 35 U.S.C. § 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as being obvious over Arpin *et al.* (U.S. Patent No. 5,242,969).

The Examiner asserts that Arpin *et al.* teach an aqueous polyolefin emulsion that includes a maleic anhydride grafted polyolefin, aminosilane coupling agents, and a fatty acid that is used in forming a sizing coating for glass fibers. The Examiner specifically refers to the Abstract and Example 12. The Examiner asserts that the inventive sizing composition may include two or

more saturated fatty acids. However, the Examiner asserts that because Arpin *et al.* teach the use of saturated fatty acids, unsaturated fatty acids, and mixtures thereof at column 3, lines 11 - 24 and in claim 1, there is a 20% probability of one of skill in the art choosing at least two saturated fatty acids. Thus, the Examiner concludes that choosing a mixture of saturated fatty acids anticipates the present invention.

Applicants respectfully traverse this rejection in view of the following remarks.

In particular, Applicants submit that Arpin *et al.* do not teach or suggest a sizing composition that comprises about 35 – 70% by weight of a grafted polyolefin as claimed in claim 1, a method of manufacturing a substantially non-discoloring reinforcing fiber material that comprises preparing a sizing composition that includes about 35 – 75% by weight of a grafted polyolefin emulsion as claimed in claim 16, or a method of making a fiber-reinforced composite having minimal discoloration that comprises applying a sizing composition that includes about 35 – 70% by weight of a grafted polyolefin as claimed in claim 16.

Applicants will assume for the sake of argument that Arpin *et al.* disclose an emulsion that contains at least one polyolefin (*e.g.*, a grafted polyolefin), an acid material (*e.g.*, saturated fatty acids), a base, and optionally an emulsifying agent. (*See, e.g.*, Abstract and column 3, lines 4 – 62). One preferred application of the emulsion according to Arpin *et al.* is in a finish composition that can include coupling agents such as silanes (*see, e.g.*, column 4, lines 25 – 30).

The finish composition includes from 2 – 15% by weight of the emulsion, *e.g.*, 2 – 15 % of an emulsion that contains at least one polyolefin, an acid material, a base, and optionally an emulsifying agent. (*See. e.g.*, column 4, lines 36 – 39). Because the finish composition contains only from 2 – 15% by weight of the emulsion and because the finish composition does not contain a grafted polyolefin other than the grafted polyolefin present in the emulsion, the finish

composition cannot contain from about 35 – 70% by weight of a grafted polyolefin. Therefore, Arpin *et al.* do not teach or suggest a sizing composition that comprises from about 35 – 70% by weight of a grafted polyolefin, as presently claimed in claim 1. Moreover, Arpin *et al.* do not teach or suggest a method of manufacturing a substantially non-discoloring fiber that comprises preparing a sizing composition that includes about 35 – 70 % by weight of a grafted polyolefin emulsion as recited in claim 16, or a method of making a fiber-reinforced composite having minimal discoloration that comprises applying a sizing composition that includes about 35 – 70% by weight of a grafted polyolefin as claimed in claim 16. Accordingly, Applicants respectfully submit that each and every element of amended independent claims 1, 16, and 18 are not disclosed within Arpin *et al.* As such, Arpin *et al.* is not an anticipatory reference.

In view of the above, Applicants submit that the present invention is not anticipated by Arpin *et al.* and respectfully request that the Examiner reconsider and withdraw this rejection.

Rejection under 35 U.S.C. § 103(a)

Claims 1 - 7 and 9 - 21 have been rejected under 35 U.S.C. § 103(a) as being obvious over Arpin *et al.* in view of WO 99/35172 or WO 00/48957.

The Examiner notes that the present claims additionally recite a level of grafting of the polyolefin (*e.g.*, claim 6) and an antifoaming agent (*e.g.*, claim 12). However, the Examiner asserts that a polyolefin grafted with maleic anhydride in the claimed amount is well-known in the art as is taught by WO 99/35172 and WO 00/48957. The Examiner specifically refers to page 5, lines 15 - 21 and page 3, lines 24 - 27 of WO 99/35172 and WO 00/48957, respectively. In addition, the Examiner asserts that the use of an antifoaming agent in glass sizing compositions is well-known in the art as is taught by WO 00/48957 at, *e.g.*, page 5, lines 5 - 6.

The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of the present invention to use an antifoaming agent as taught by WO 00/48957 in the emulsion of Arpin *et al.* since Arpin *et al.* teach employing additional additives (*see, e.g.*, column 4, lines 33 – 35 of Arpin *et al.*), or to utilize polyolefins grafted with maleic anhydride in Arpin *et al.* since the use of grafted polyolefin coating compositions is well-known as taught by WO 99/35172 and WO 00/48957.

Applicants will address the rejection of Arpin *et al.* in view of WO 99/35172 and Arpin *et al.* in view of WO 00/489957 independently.

A. Rejection of Arpin *et al.* in view of WO 99/35172

In response to this rejection, Applicants respectfully direct the Examiner's attention to the argument set forth above with respect to the rejection under 35 U.S.C. § 102(b) over Arpin *et al.* Accordingly, Applicants respectfully submit that amended independent claims 1, 16, and 18 are patentable distinguishable over Arpin *et al.*

With respect to WO 99/35172, it is submitted that the asserted teachings of WO 99/35172, namely the asserted teaching of a level of grafting of a polyolefin (*e.g.*, claim 6) and the asserted teaching of the addition of an antifoaming agent to a sizing composition (*e.g.*, claim 12), do not make up for the deficiencies of Arpin *et al.* Therefore, Applicants respectfully submit that the combination of the Examiner's cited references neither teach nor suggest the presently claimed invention. As a result, independent claims 1, 16, and 18, and all claims dependent therefrom, are non-obvious and patentable.

B. Rejection of Arpin *et al.* in view of WO 00/48957

With respect to WO 00/48957, Applicants note that the secondary reference to WO 00/48957 is commonly owned by Assignee Owens Corning. As such, and in view of recent changes to U.S. Patent Law, this reference may be removed as prior art in obviousness rejections under 35 U.S.C. § 103/102(e) in new or continuing applications, so long as the reference was commonly owned with the claimed subject matter at the time the present invention was made.

Essentially, the AIPA (enacted November 29, 1999) provides that an application filed after November 29, 1999, is subject to the new provisions of 35 U.S.C. § 103(c). As such, no obviousness rejection can be made based on a patent's filing date (a § 103/102(e) rejection), if the patent and application are commonly owned. Because the present application was filed after November 29, 1999, the U.S.P.T.O. will recognize the application for the purposes of 35 U.S.C. § 103 as one which is subject to the new statute.

To disqualify a reference under 35 U.S.C. § 103(c), the Applicant needs to supply evidence that the invention described in the application for patent and the invention described in the "prior art" reference applied against the application were commonly owned by, or subject to an obligation of assignment to, the same person or entity, at the time the invention in the application for patent was made. The time requirement "at the time the invention was made" is required by statute. (See 35 U.S.C. § 103(c)).

Applications and references will be considered by the Examiner to be owned by, or subject to an obligation of assignment to the same person or entity, at the time the invention was made, if the applicant(s) or an attorney or agent of record makes a statement to the effect that the application and the reference were, at the time the invention was made, owned by, or subject to an obligation of assignment to, the same person or entity. Thus, a statement, by itself, will be

sufficient evidence. (See the "Guidelines Setting Forth a Modified Policy Concerning the Evidence of Common Ownership, or an Obligation of Assignment to the Same Person, as Required by 35 U.S.C. 103(c)," 1241 OG 96 (Dec. 26, 2000)).

Statement Of Common Ownership By Applicants' Representative

In light of the above, Applicants' representative submits that the present application for patent and WO 00/48957 (secondary 102(e) reference applied against the application) were commonly owned by, or subject to an obligation of assignment to, Owens Corning at the time the invention of the present application was made.

Accordingly, the rejection of claims 1 - 7 and 9 - 21 under 35 U.S.C. § 103(c) as being unpatentable over Arpin *et al.* in view of WO 00/48957 must therefore be withdrawn by the Examiner.

In view of the above, Applicants respectfully submit that the present invention is not obvious over Arpin *et al.* in view of WO 99/35172 and WO 00/48957 and respectfully request that this rejection be reconsidered and withdrawn.

Rejection under 35 U.S.C. § 102(a)/103(a)

Claims 1 - 8 and 10 - 22 have been rejected under 35 U.S.C. § 102(a) as being anticipated by, or in the alternative, under 35 U.S.C.§ 103(a) as being obvious over WO 00/48957.

Applicants respectfully traverse this rejection in view of the following remarks.

WO 00/48957 discloses a sizing composition for glass fibers that includes a cationic high molecular weight acid or anhydride modified polypropylene film former, an aminosilane coupling

agent, a cationic lubricant, and a nucleating agent which may be a fatty acid. (*See, e.g.*, page 3, lines 4 – 6). However, unlike the sizing formulation disclosed in WO 00/48957, the embodiments of the inventive sizing composition eliminate the need for a lubricant as a separate ingredient in addition to a fatty acid blend. In this regard, Applicants have amended claims 1, 16, and 18 to recite the transitional phrase "consisting essentially of" to eliminate the presence of a lubricant in the claimed sizing formulation, which would materially affect the basic and novel characteristics of the claimed sizing formulation. Thus, WO 00/48957 does not teach or suggest the claimed sizing composition, which does not contain a separate lubricant. Moreover, there is no teaching or suggestion for an ordinarily skilled artisan to remove the lubricant from WO 00/48957. Further, Applicants submit that WO 00/48957 teaches away from the presently claimed sizing composition because it necessarily includes a lubricant, which is not presently claimed and specifically excluded. Therefore, Applicants submit that claims 1, 16, and 18 are non-obvious and patentable.

In view of the above, Applicants respectfully submit that the present invention is not anticipated by, or obvious over, WO 00/48957 and respectfully request that the Examiner reconsider and withdraw this rejection.

Rejection under 35 U.S.C. § 103(a)

Claims 1 - 22 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 00/48975 in view of Mientus *et al.* (U.S. Patent No. 6,106,982) and Applicants' teaching of MOLDPRO 1327 at page 14 of the specification.

In response to this rejection, Applicants rely on the arguments presented above with respect to the rejection under 35 U.S.C. § 102(a)/103(a) over WO 00/48957. Mientus *et al.*, which is directed to an "Image Receptor Laminate" does not teach or suggest the use of a fatty acid

blend such as MoldPro 1327 or MoldPro 932, in a sizing composition. Thus, it is submitted that the teachings of Mientus *et al.* do not make up for the deficiencies of WO 00/48957. As discussed above, WO 00/48957 does not teach or suggest the claimed sizing composition, which does not contain a separate lubricant or teach a method of manufacturing a substantially non-discoloring fiber material that includes preparing a sizing composition that does not contain a separate lubricant or a method of making a fiber-reinforced composite having minimal discoloration that includes applying a sizing composition that does not contain a separate lubricant. Therefore, independent claims 1, 16, and 18 are non-obvious and patentable. Because claims 2 – 15 are dependent upon claim 1, claim 17 is dependent upon claim 16, and claims 19 – 22 are dependent upon claim 18, and claims 1, 16, and 18 are believed to contain patentable subject matter, claims 2 – 15, 17, and 19 – 22 are also believed to contain patentable subject matter.

Therefore, Applicants submit that the present invention is not obvious over WO 00/48957 in view of Mientus *et al.* and respectfully request that this rejection be reconsidered and withdrawn.

Information Disclosure Statement

Applicants acknowledge with thanks the Examiner's consideration of all of the references submitted in the Information Disclosure Statement filed on September 18, 2002.

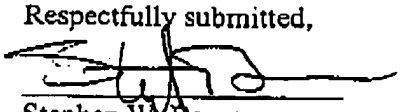
CONCLUSION

In light of the above, Applicants believe that this application is now in condition for allowance and therefore request favorable reconsideration and further examination culminating in a Notice of Allowability.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 50-0568 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,



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